REMARKS

The Examiner is thanked for the thorough examination of the present application. The FINAL Office Action, however, continued to reject all examined claims 17-20. In response, claims 17 and 19 have been amended to more clearly identify novel and non-obvious aspects or features of embodiments of the present invention. New claims 21 and 22 have been added. No new matter has been added by these amendments, and entry and full consideration of the amendments are respectfully requested.

Response To Claim Rejections Under 35 U.S.C. §102

Claim 17-20 stand rejected under 35 U.S.C. §102(e) as allegedly anticipated by Osame et al (U.S. Patent No. 2003/0160745). Applicant respectfully traverses this rejection on at least the grounds that the Osame reference does not disclose, teach, or suggest all of the claimed elements.

For a proper rejection of a claim under 35 U.S.C. Section 102(e), the cited reference must disclose all elements/features/steps of the claim. See, *e.g.*, *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 USPQ2d 1129 (Fed. Cir. 1988).

Claim 17 states:

> 17. A pixel structure for active matrix OLED display, comprising:
> a switching transistor having a control terminal coupled to a scan electrode and a first terminal coupled to a data electrode;
> a driving transistor having a control terminal coupled to a second electrode of the switching transistor and a first terminal coupled to a power voltage;
> a OLED having an anode coupled to the second terminal of the driving transistor, and a cathode coupled to a common electrode;
> ***a storage capacitor coupled between the control terminal of the driving transistor and the common electrode, controlling turning on/off of the driving transistor according to data stored therein when the switching transistor is turned off***; and

a first transistor comprising a first terminal coupled to the anode of the OLED and a second terminal coupled to a first voltage and a control terminal coupled to a control signal, pulling down the potential at the anode of the OLED according to the control signal thereby inducing a reverse current to neutralize carrier accumulation inside the OLED, wherein the first voltage is variable and is determined by the data stored in the storage capacitor and the control signal is applied to turn on the first transistor during an N^{th} frame and an $N+M^{th}$ frame, N and M are both positive integrals and M>1.

(*Emphasis added.*)

Claim 19 states:

19. An active matrix OLED display, comprising:
at least one pixel, comprising:
a switching transistor having a control terminal coupled to a scan electrode and a first terminal coupled to a data electrode;
a driving transistor having a control terminal coupled to a second electrode of the switching transistor and a first terminal coupled to a power voltage;
a OLED having an anode coupled to the second terminal of the driving transistor, and a cathode coupled to a common electrode;
a storage capacitor to coupled between the control terminal of the driving transistor and the common electrode, controlling turning on/off of the driving transistor according to data stored therein when the switching transistor is turned off; and
a first transistor comprising a first terminal coupled to the anode of the OLED and a second terminal coupled to a first voltage and a control terminal coupled to a control signal, pulling down the potential at the anode of the OLED according to the control signal thereby inducing a reverse current to neutralize carrier accumulation inside the OLED, wherein the first voltage is variable and is determined by the data stored in the storage capacitor and the control signal is applied to turn on the first transistor during a N^{th} frame and a $N+M^{th}$ frame, N and M are both positive integrals and M>1.

(*Emphasis added.*) Independent claims 17 and 19 are allowable for at least the reason that Osame does not disclose, teach or suggest the features that are highlighted in the claims above. More specifically, the capacitor 110 in Osame is different from the claimed storage capacitor in claims 17 and 19. Because two terminals of the capacitor 110 in Osame are

coupled to the anode and cathode of the EL element 109 respectively and does not coupled to the control terminal of the driving transistor 107, the capacitor 110 in Osame cannot control turning on/off of the driving transistor 107 according to data stored therein when the switching transistor 105 is turned off (as expressly recited in each of claims 17 and 19). Hence, the capacitor 110 in Osame is different from the claimed storage capacitor, and Osame reference does not disclose, teach, or suggest all of the claimed elements.

Further, as shown in figures in Osame, the transistor 108 is coupled between the EL element 109 and a fixed negative voltage (-14V) rather than a variable reverse voltage determined by the data stored in the storage capacitor. Hence, a large current consumption would induce during neutralizing carrier accumulation inside the LE element in Osame, as compared to the claimed embodiments. Namely, Osame does not teach that the claimed first voltage, which is a variable reverse voltage, is determined by the data stored in the storage capacitor, and thus, Osame reference does not disclose, teach, or suggest all of the claimed elements.

Moreover, as shown in Figs. 6A, 6B, 10A~10C and 11A of Osame, the erasure and reverse bias gate lines are operated in each frame period, and thus, carrier accumulation inside the OLED is neutralized every frame period, causing power consumption thereby. On the contrary, the control signal in the claimed embodiments is applied to turn on the first transistor during a N^{th} frame and a $N+M^{th}$ frame, N and M are both positive integrals and M>1. Namely, carrier accumulation inside the OLED is not neutralized in every frame period. For example, the carrier accumulation inside the OLED can be neutralized in the first, fourth and seventh frame periods and does not be neutralized in the second, third, fifth, sixth, eighth and ninth frame periods, and so on. Hence, a large power consumption would

be induced for neutralizing carrier accumulation inside the LE element every frame period in Osame, compared to the claimed invention.

As the cited reference does not disclose all elements expressly claimed in independent claims 17 and 19, the 102 rejection should be withdrawn.

Because independent claims 17 and 19 are allowable over the prior art of record, their dependent claims 18 and 20 are allowable as a matter of law, for at least the reason that these dependent claims contain all features/elements/steps of their respective independent claims 17 and 19. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Additionally and notwithstanding the foregoing allowability of these dependent claims, the dependent claims recite further features and/or combinations of features (as is apparent by examination of the claim itself) that are patentably distinct from the prior art of record. Hence, there are other reasons why this dependent claim is allowable.

New Claims

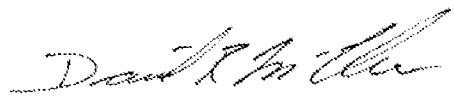
New independent claim 21 defines similarly defining features, and patently defines over the cited art for reasons that are similar to those set forth above. Claim 22 depends from claim 21 and defines over the cited art for at least the same reason.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 17-22 are in condition for allowance.

No fee is believed to be due in connection with this submission. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted ,

By: 

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